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Arterial wall of SMCRT mouse

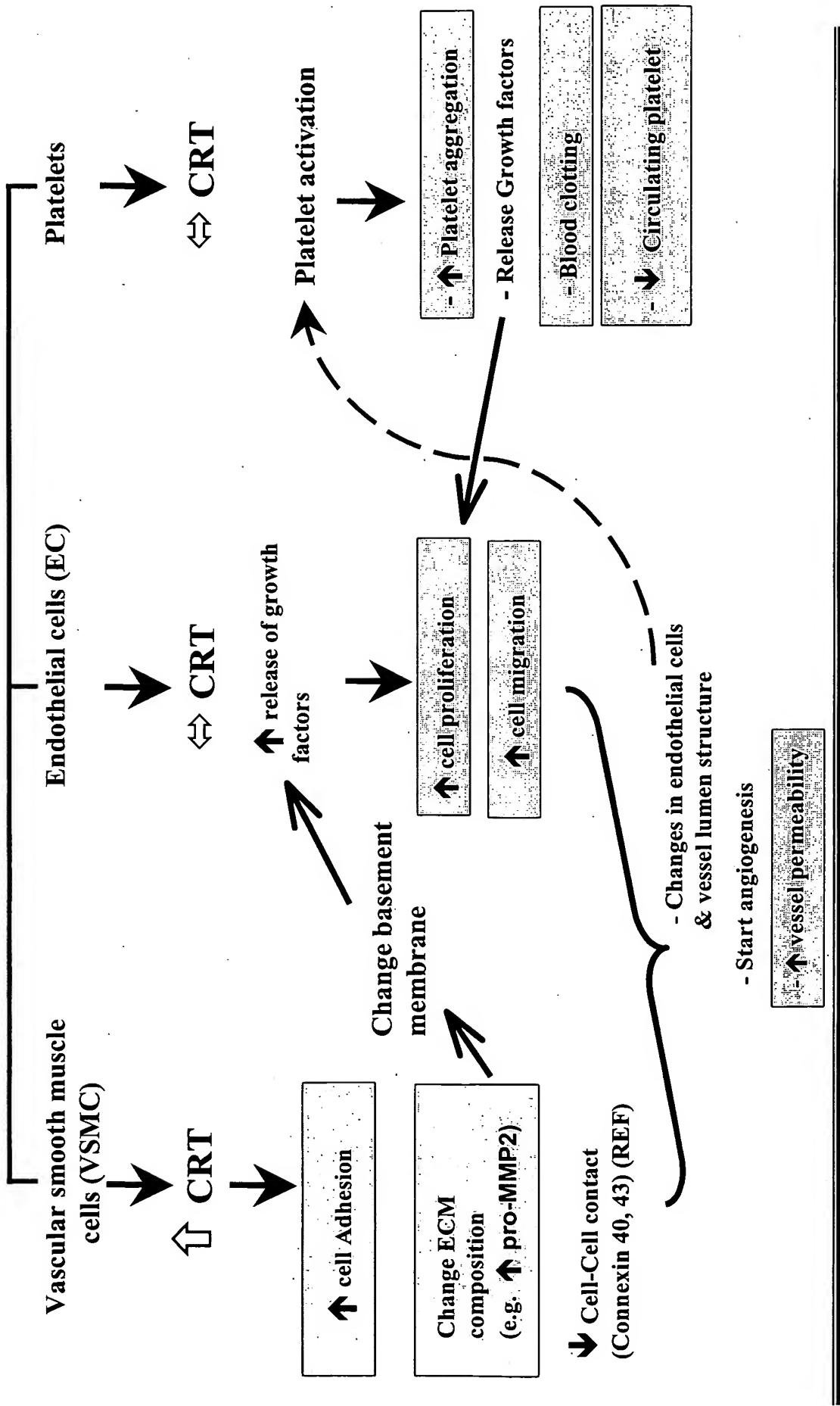
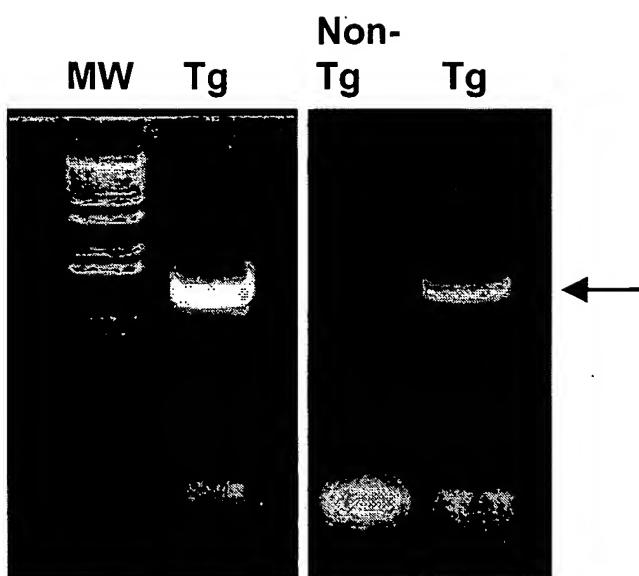


Fig. 1.

A



B

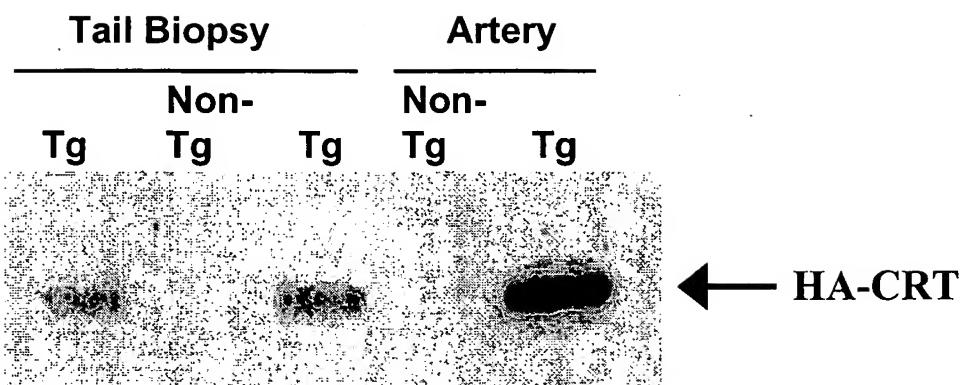
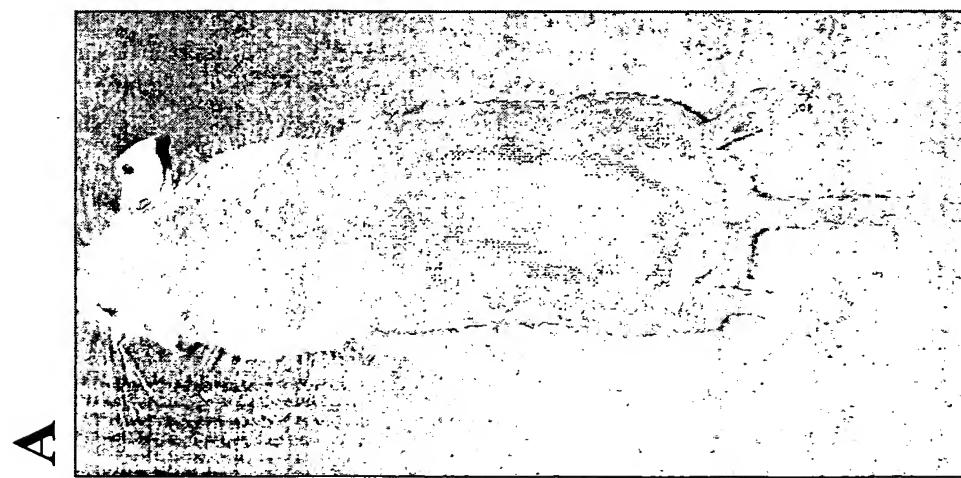
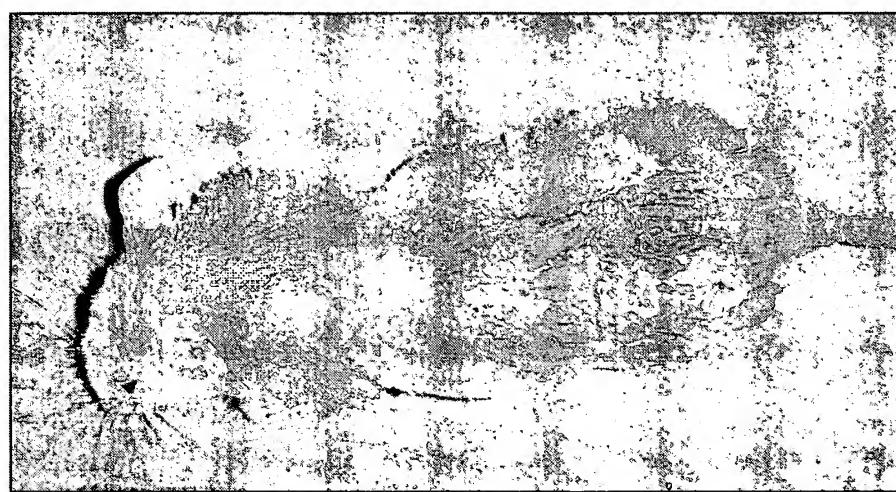


Fig. 2.



B

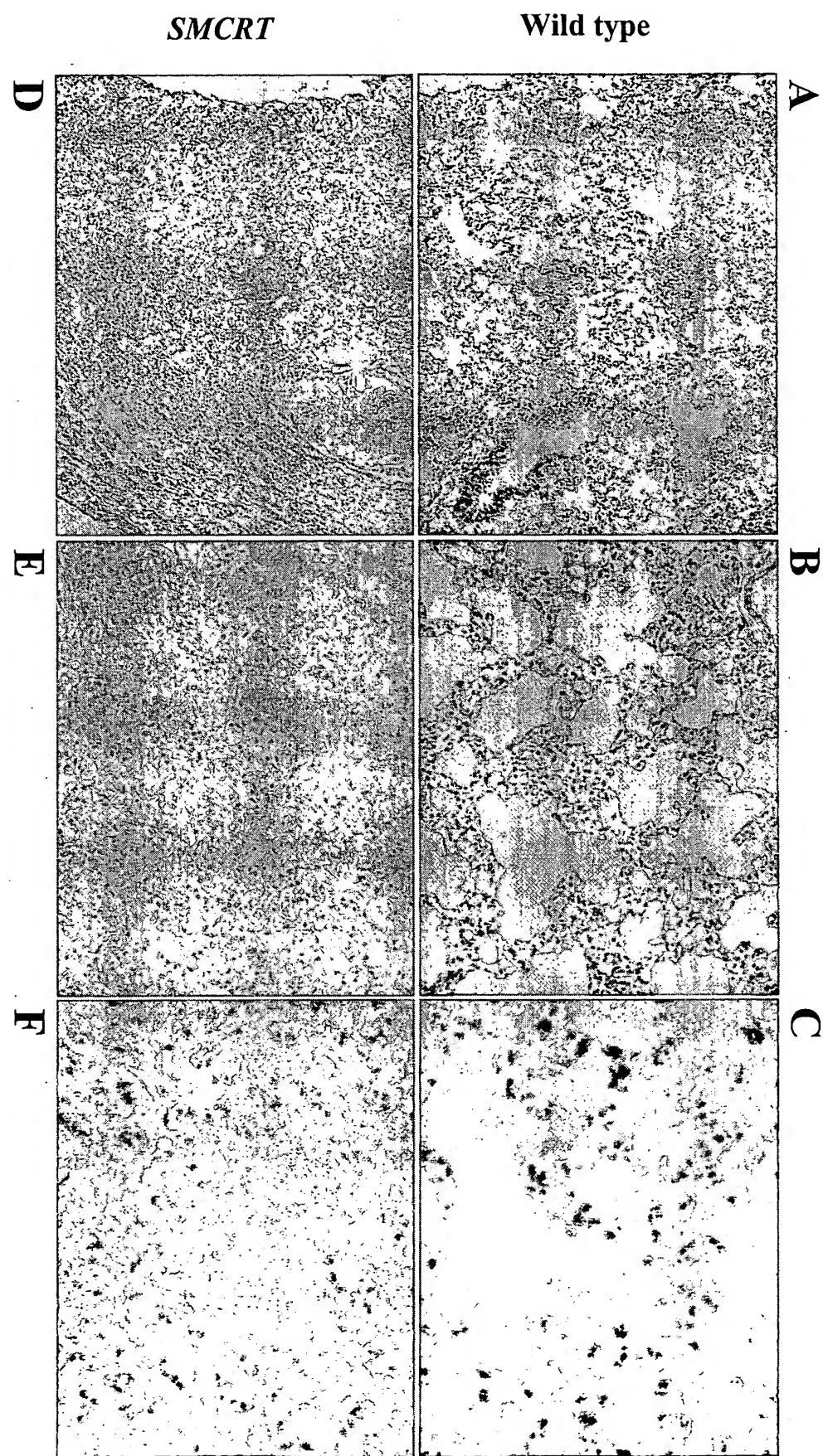


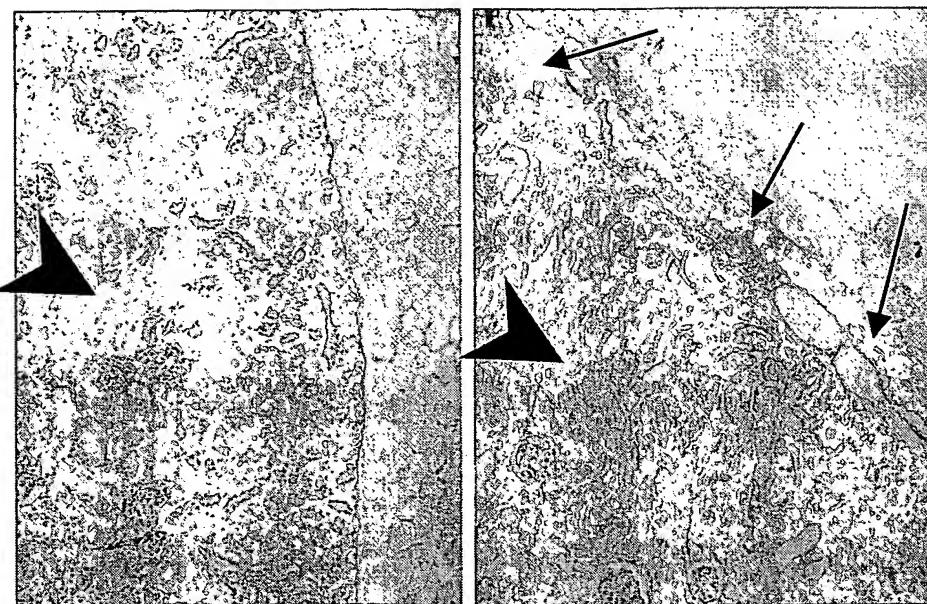
C



Fig. 3.

Fig. 4.





C. *SMCRT*



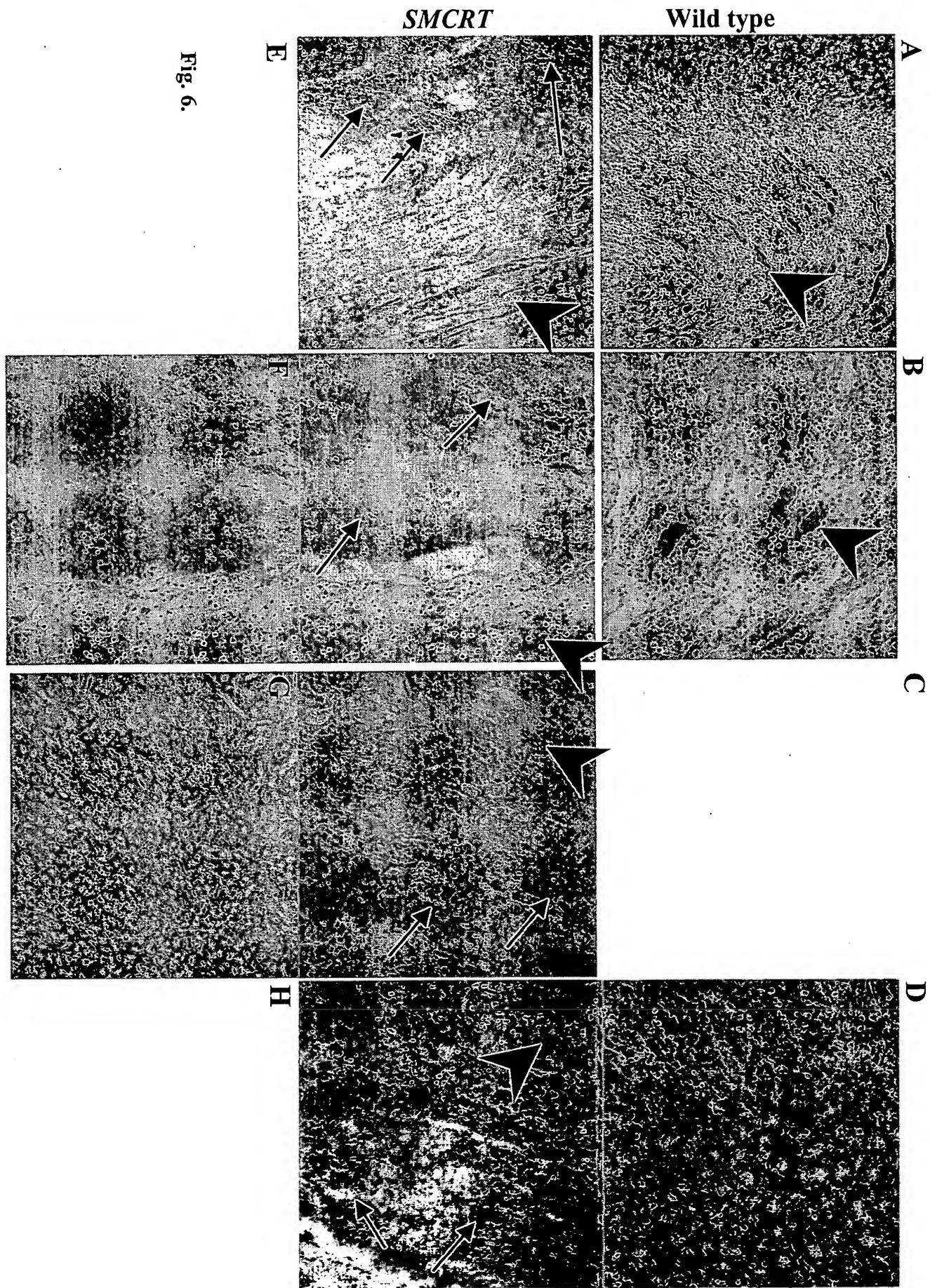
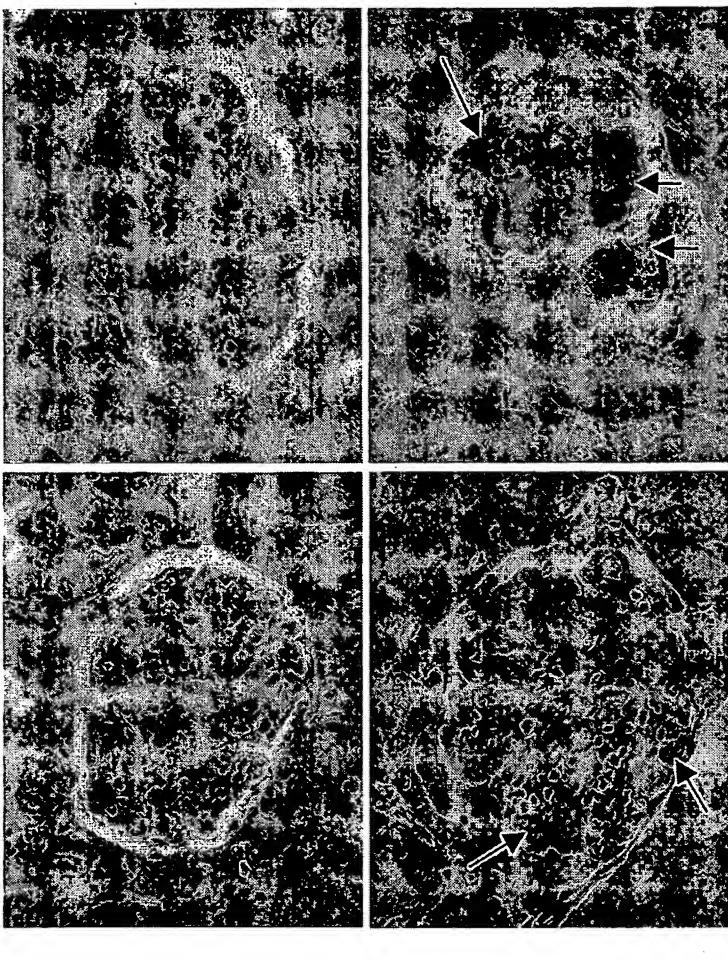


Fig. 6.



A. Wild Type

B. *SMCRT*

Fig. 7.

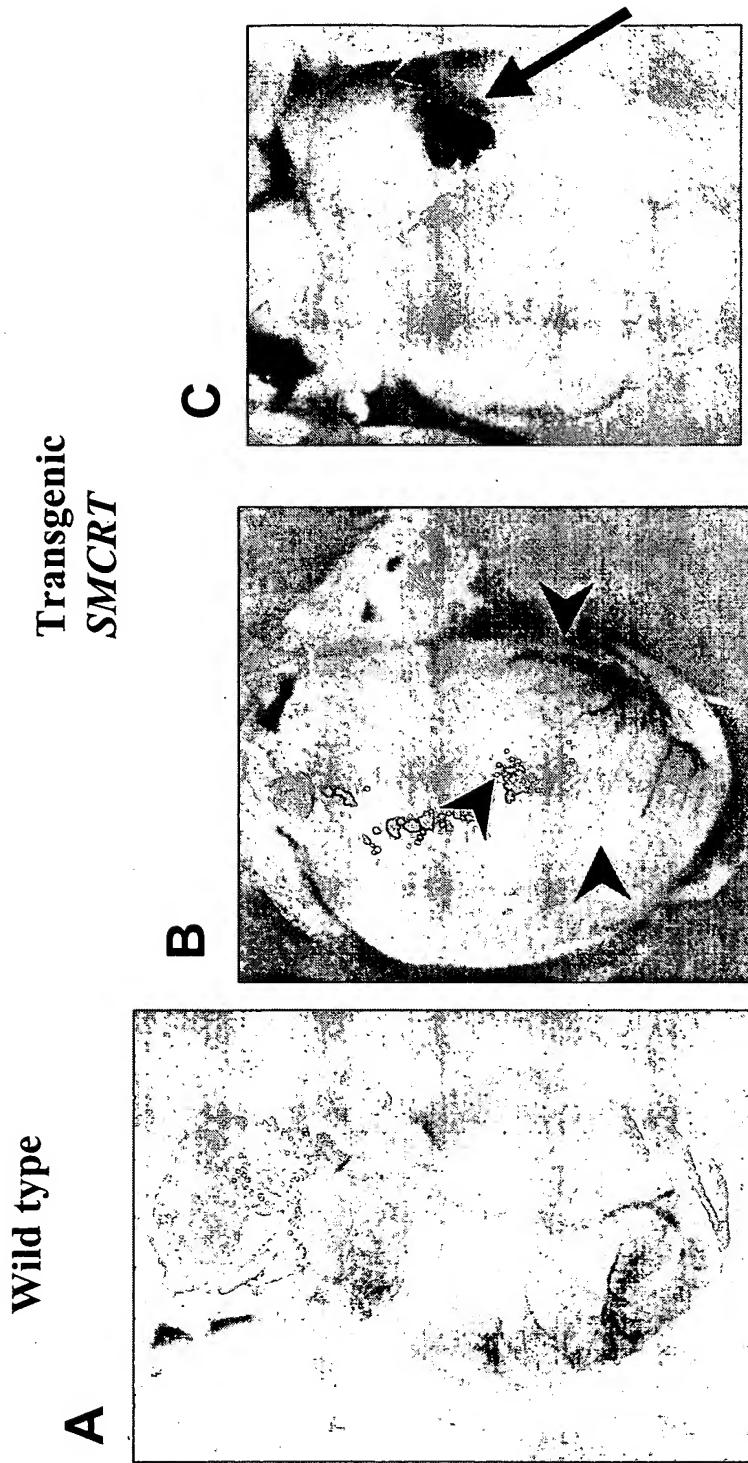
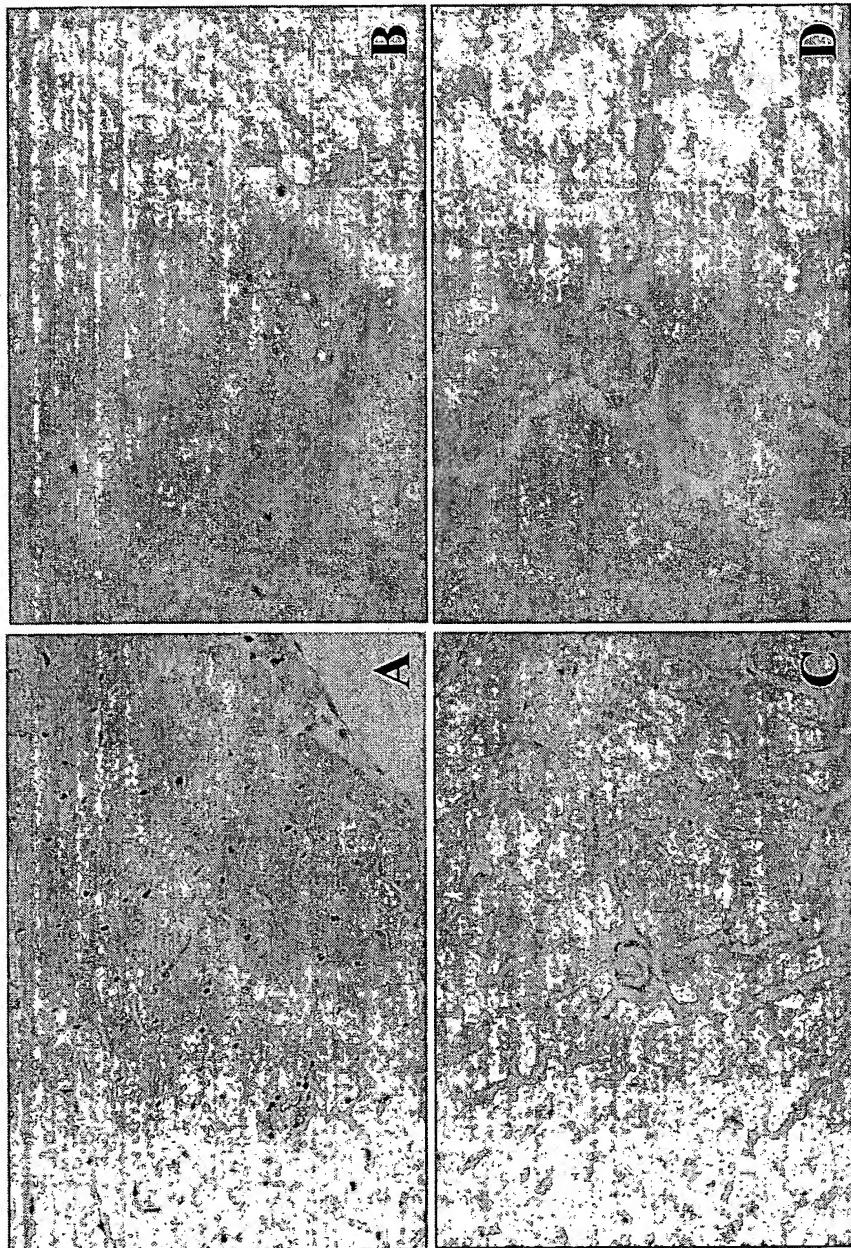


Fig. 8.



Wild type

SMCRT

Fig. 9.

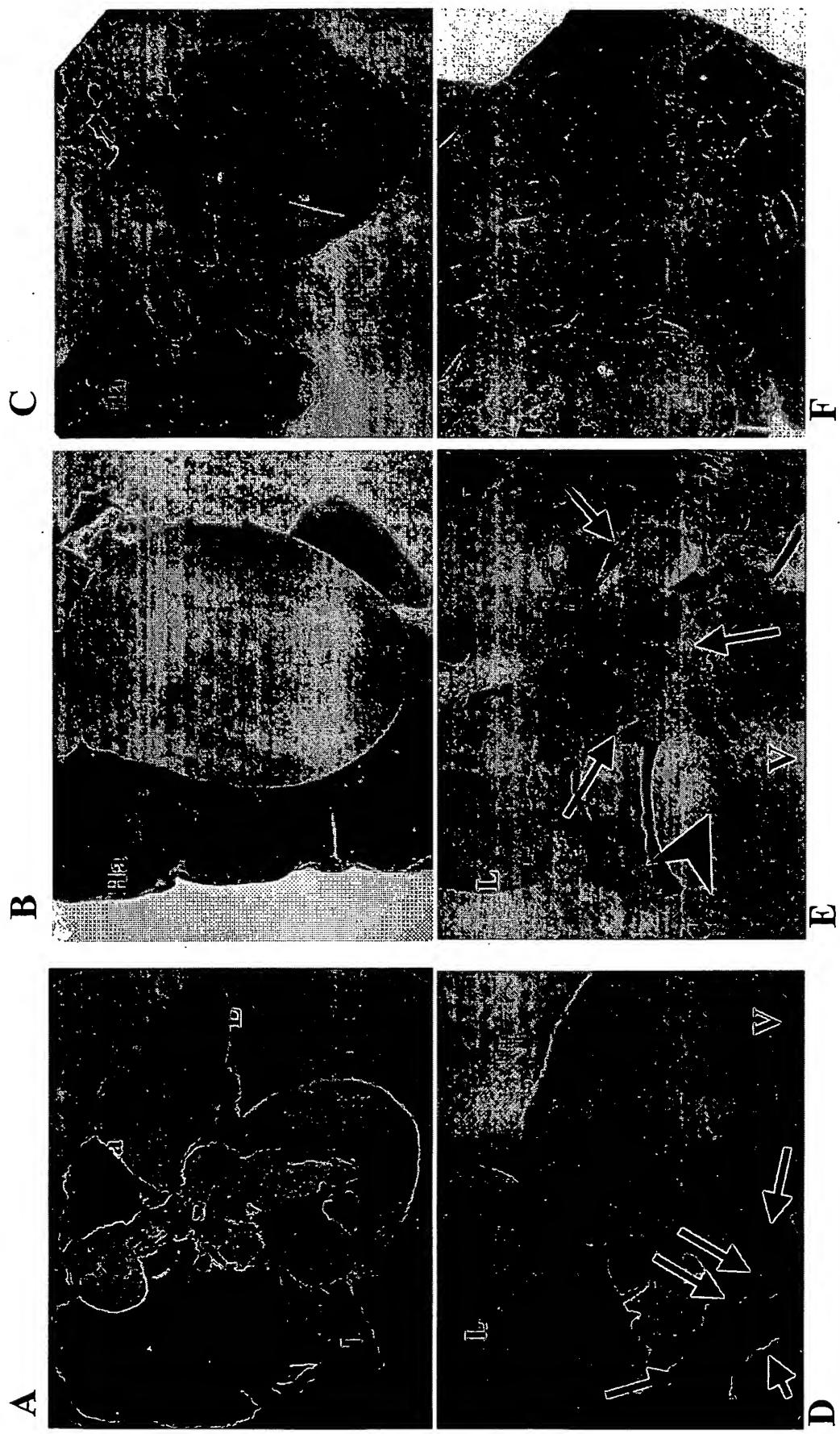


Fig. 10.

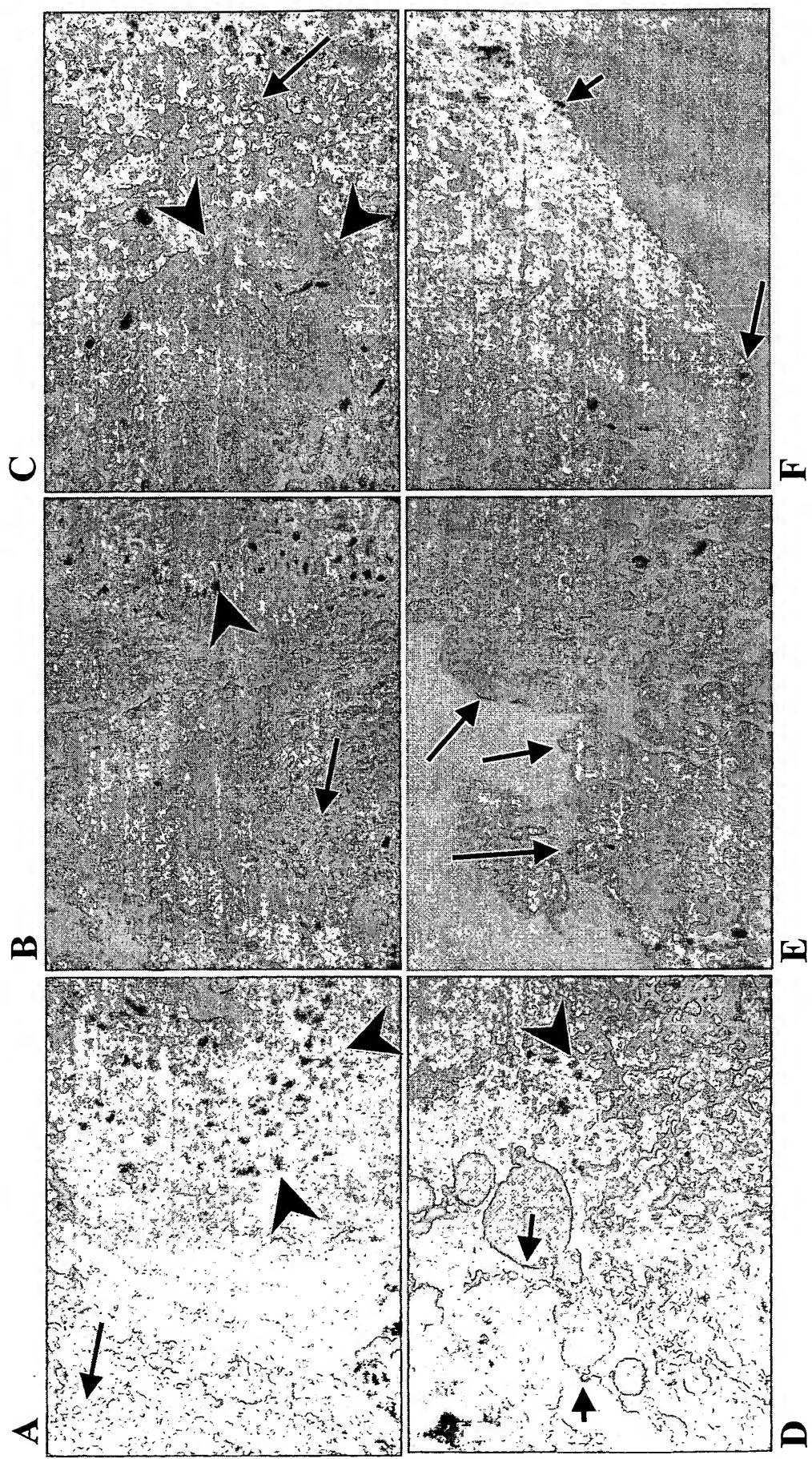


Fig. 11.

Coronary artery

Renal arteriole

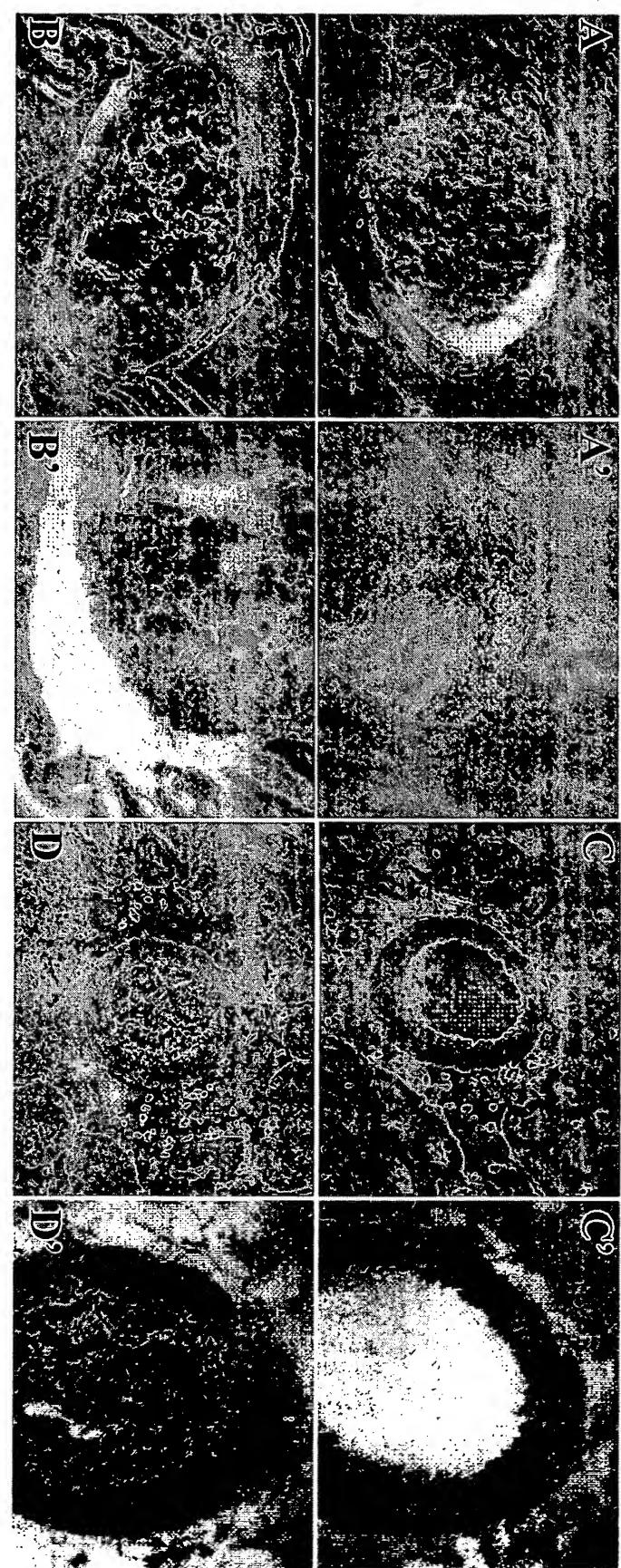


Fig. 12.

A. Wild type



B. *SMCRT*

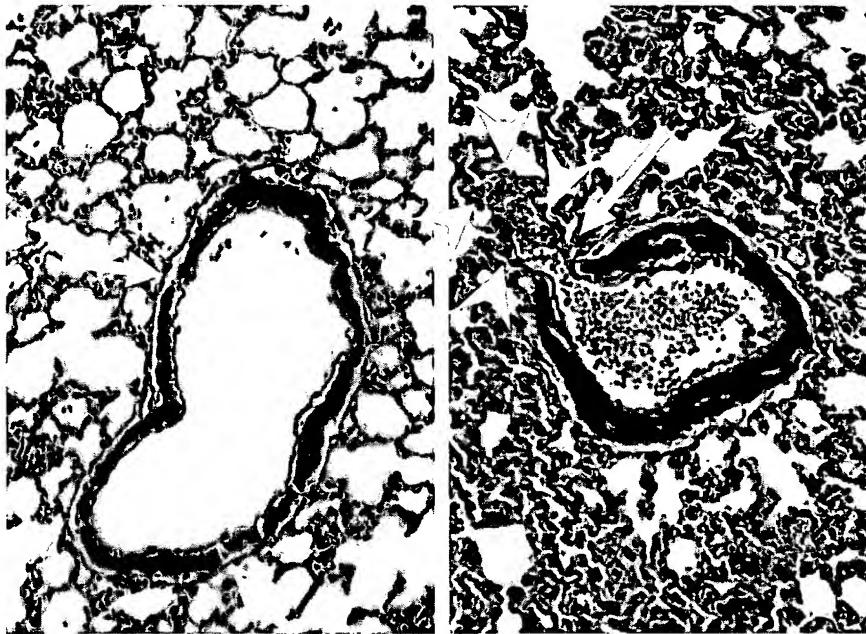


Figure 13- Masson Trichrome staining of lung sections of wild type (A) and *SMCRT* (B), showing the changes in the arteriole walls of the transgenic mice. Arrows (Green) indicates the disruption in the smooth muscle layer and migration of the endothelial cells thus developing a pouch containing red blood cells (lined by the arrow heads in B) which can lead to the formation of hemangioma.

A. Smooth muscle cell lysate

B. Hearts

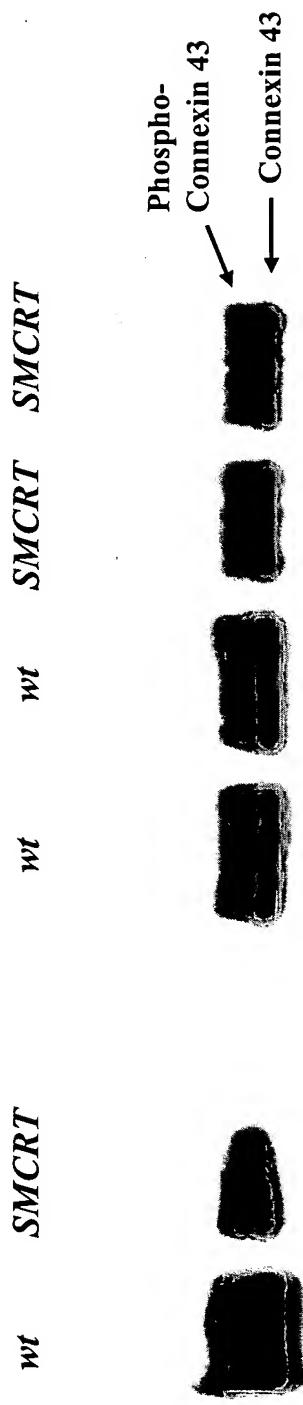


Figure 14- Western blot analysis showing connexin 43 expression in the vascular smooth muscle cells (A) and hearts (B) isolated from the wild type and *SMCRT* mice. There was a significant decrease in the connexin 43 protein in the transgenic mice as compare to the wild type mice.

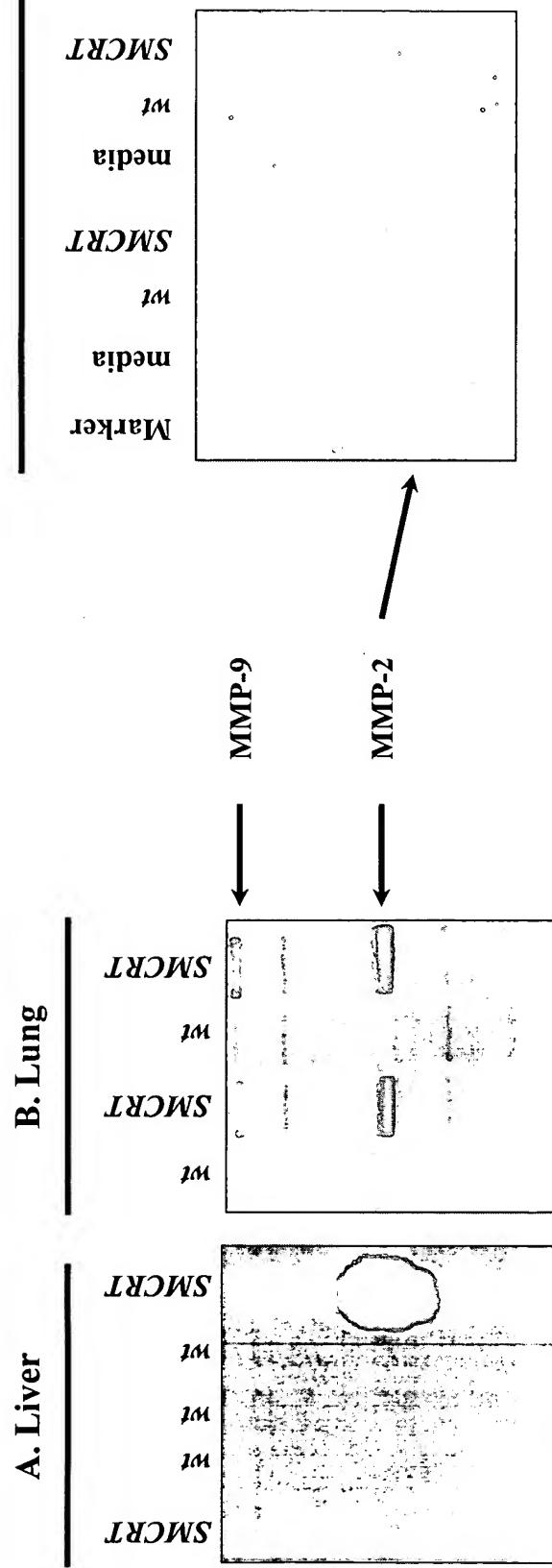


Fig. 15. Gelatin Zymography detecting the MMP-2 and MMP-9 activity in liver (A) and lung (B) tissue isolated from the *wt* and *SMCRT* mice. C) shows the activity of MMP-2 in the culture media from the *wt* and *SMCRT* smooth muscle cells detected by gelatin zymography. Briefly, cells were cultured in DMEM containing Insulin and transferrin for 24 hrs. 30 μ l of media from culture plate with no cells (Media), wt cells and *SMCRT* cells (or 30 μ g protein from each tissue) were separated on 7.5% SDS-acrylamide gel containing 1 mg/ml Gelatin. After removal of SDS from the gel (to re-nature the proteins), it was incubated in zymography buffer overnight at 37°C. The gels were then stained with Coomassie Blue and de-stained. The white bands represent the activity of MMP in the sample.

Figure 16

Nucleotide and protein sequence of SM22 α -CRT

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Figure 17

Nucleotide and protein sequence of SM22 α -CRT-HA

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